Beaver Group

BEAVER TECHNOLOGY SERVICES

MRG9 Hub Recovery Descender

Instructions for use / Inspection & test log book

EN391 / EN1496

Beaver Technology Services Pty Ltd are the Australian Agents of the Mittelmann range of products

EMPOWERED BY INNOVATION

Certificate of Manufacture and Guarantee

Customer:……

User Name:……

Date of first use:……

Year of Manufacture:……

Serial Number:……

Supplier…….....……Beaver Technology Services Pty Ltd…….....……

Manufacturer: Mittelmann Armaturen Gmbh & CoKG

Class of appliance: B

Descent Height:…….....

Maximum Descent / Abseiling Load: 150kg

Maximum Recovery Load: 100kg

Maximum Recovery Height: 3.0m

This user's manual and operating instructions are part of the PPE (Personal Protective Equipment) range of equipment:

- All users should be totally familiar with its contents.
- All users **must** be fully trained and competent in the use of this equipment.
- It should be available for use at all times.

1. Application:

This rescue device is used for lifting and descending; the appliance "MRG9 Hub" is a rescue apparatus by means of which one or more persons, one after the other can descend at a controlled speed. In addition a person can be winched up by a rescuer after a free fall has been sustained. It must be only used as a rescue system and never as a fall arrest system.

2. Inspection:

Before use the rescue / descending device must be subject to a visual inspection and function test. The function test is performed as follows: Pull once at the left lowering rope and once on the right lowering rope. The rope must be relatively hard, but even tension to pull.

If there is any doubt regarding the safe state of the system or its components, these must be checked by a competent trained person and changed if needed (return to the supplier for repair and re-certification).

- DAMAGED DEVICES, HARNESSES AND OR ROPES MUST NOT BE USED -

Any system that has been exposed to a load from a fall **must** be tagged **"Out of Service"** it must be removed from service and returned to the supplier or authorised agent for repair and re-certification.

The rescue device **must** be inspected by the supplier or authorised agent for repair and re-certification every 12 months – even if the device has not been used.

In the case of numerous uses, or greater stressing (e.g. environmental or industrial factors affecting the materials), the complete device should be subjected to inspections at an accordingly higher frequency.

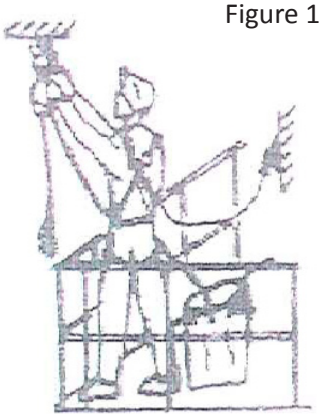
After being used in a rescue this device must be returned to the supplier or authorised agent to be inspected, tested and re-certified.

The rope* must be examined after every 1000m descending/hoisting travel and the brake must be examined after 1000m descending / hoisting travel. These inspections must comply with manufacturers / supplier's inspection instructions.

**Only approved rope to be used.*

CAUTION: *This product cannot be altered or modified. Never exchange or substitute components!*

Figure 1



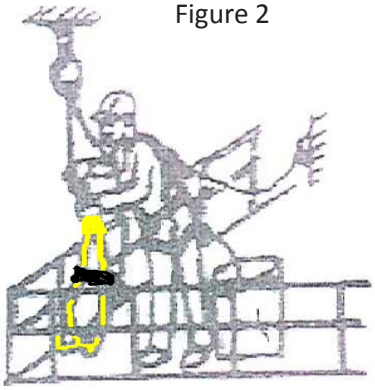
3. Use

3.1 Descending

The descending device along with the ropes are to be pulled out of the bag until the snap hook which is connected to the descending unit can be fastened to an anchor point in accordance with AS/NZS 1891.4 (See Figure 1).

This device must be positioned above the user and the anchor point must have a load capacity of 12kN according to AS/NZS 1891.1. Adjust the snap hook of the lowering rope to the fastening point of the rescue harness and secure it (See Figure 2).

Figure 2

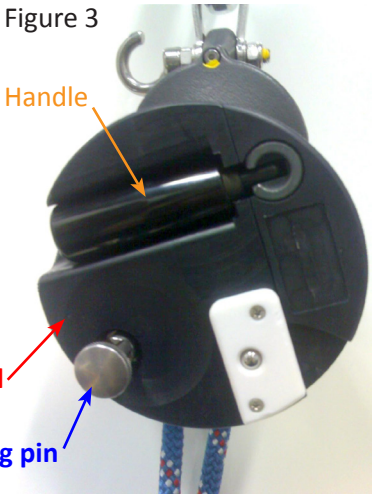


CAUTION: *When preparing for descending take precautions against falling.*

Both ends of the rope are provided with snap hooks. The lowering rope must run freely through the device, one snap hook must be positioned at the top, and the other hook must be positioned at the lower level / ground. The first person adjusts the rope to ensure that the rope is taut to the device when connected to the harness.

CAUTION: *Never drop onto a slack rope.*

Figure 3



When descending, the hand wheel must stay in a locked position, use the Securing pin on the hand wheel and adjust the handle so that it locks into the wheel (See Figure 3). Ensure that the securing pin is in a locked out position (allowing the handle to rotate freely). Step out and descend with your face towards the wall / structure (See Figure 4 & 5). The rate of descent is controlled automatically.

CAUTION: *Look for possible obstacles before descending!*

Figure 4

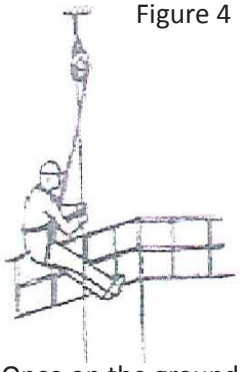


Figure 5

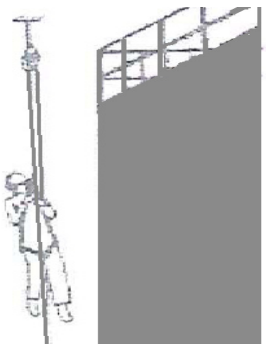
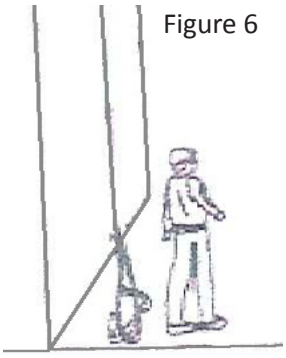


Figure 6



Once on the ground, disconnect the snap hook from the harness and ensure that the rope is not tangled or caught on any obstacles (See Figure 6).

The second person can now connect the snap hook on the other end of the rope to their harness, ensure that all the slack rope has been pulled through the Descender. The second person is now ready to descend. Step out and descend with face towards the wall (See Figure 4 & 5).

Further rescues can now occur using the same procedures as before.

CAUTION: *Exercise extreme caution before descending and ensure that you are always correctly connected to an anchor point.*

Protect ropes from sharp edges, welding sparks, paints or other destructive or damaging risks.

3.2 Lifting Functions

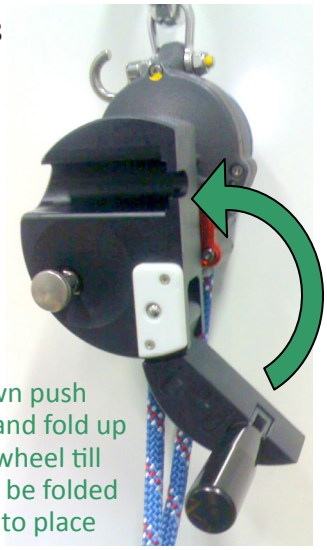
For raising a person from a lower position, (maximum distance 3m) the rescue and descending device must be fixed and secured with the double action karabiner to an anchor point in accordance with AS/NZS 1981.1.

Figure 7

Ensure that the lowering rope is fully deployed (on the ground with no snags or tangles). The person to be raised can then be attached by the snap hook to their harness. Open the hand wheel as follows: open the handle and Click into position until it locks. (See Figure 7 & 8). The Securing pin must stay in a withdrawn position and locked out so it does not interfere with the rotation of the wheel.

By turning the hand wheel, the person can be raised by the rescuer. When the raising process needs to be interrupted, the hand wheel can be arrested with the Securing pin. To do so, keep holding onto the handle of the wheel, pull out the Securing pin and twist until it locks into the protruding position. Slowly twist the hand wheel back until the Securing pin is touching the arresting point (See Figure 9).

Figure 8



To fold down push ball pin in and fold up section of wheel till handle can be folded & locked into place

When you need to continue the recovery, turn the hand wheel a little further in the direction of lifting, pull back the Securing pin and turn it back to a arrested position, continue to raise the person till in desired position.

If raising the person to remove fall arrest equipment (i.e. a deployed shock absorbing lanyard), use the Securing pin to hold the person whilst removing fall arrest equipment. Once the deployed fall arrest equipment is discarded, lock the Securing pin in the descent position and hold hand wheel, and ensure descending person is clear and let handle wheel go, so that person will automatically descend to the ground.

Figure 9

4. Cleaning and Storage

After use, the descending device and lowering rope must be cleaned, if necessary. They can be cleaned using a mild natural soap and water. When wet the device must be allowed to dry naturally. Do not put the device or rope near a fire or any other source of heat. The descending device and lowering rope must be stored in a dry, ventilated area out of direct sunlight. Contact with acids, caustic liquids and oils must be avoided.

Well-kept ropes have a longer life.

5. Service Life

The service period depends on the respective conditions prevailing during use. According to the experience gathered, a service life of 5 years can be expected for the ropes subject to normal use (subject to regular inspection).

6. Advice

For each device, component instructions, inspection and test log books are supplied. These must be kept with the equipment. Please observe the instructions for use of any other products used in connection and conjunction with the MRG9 Hub Descender as well as the latest rules and regulations for the prevention of accidents.

INSPECTION AND TEST LOG BOOK			
Date of Test	Serial No.	Test Results	Stamp / Signature of certified person

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Warning

In some states and territories the users of this equipment may need to hold documented and accredited training. Please check with your local regulatory authority for their requirements prior to use.